The WHY

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Most people can drive a car …

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1. Grab a pen
2. Blank piece of paper
3. Listen to instructions

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2 TYPES of Retrieval Practice

A. Storage strength = entrenched
B. Retrieval strength = activation

Robert & Elizabeth Bjork (1992)

Scan QR for RESOURCES

YOU WILL NEED:
1. Mobile phone
2. Pen or pencil

Download:

bit.ly/CPDpack

The research ...

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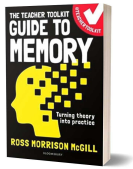
1. Rate their teacher training history with cognitive science ...
2. How confident do you feel in your own practice?
3. Which aspects of this field do you find challenging?



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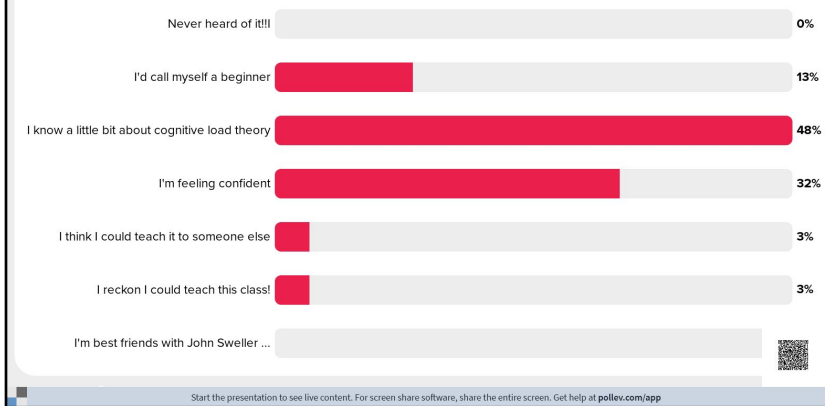
Scan QR for surveys..

or visit

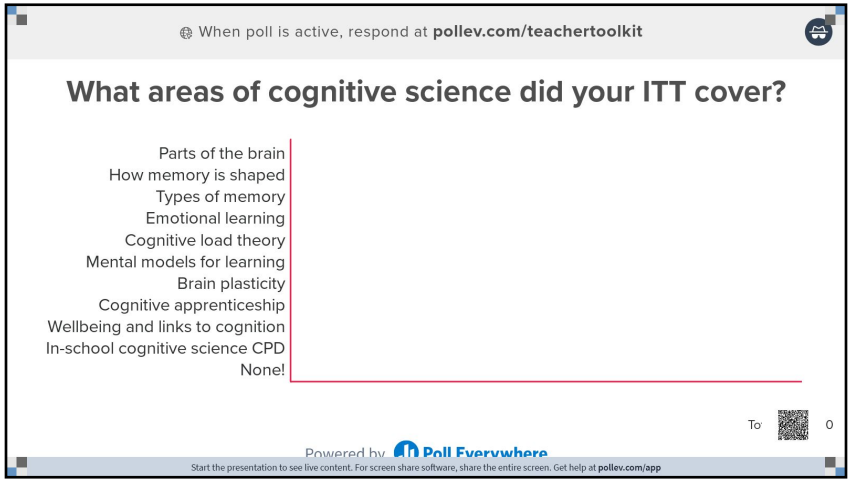
PollEV.com/TeacherToolkit

Understanding Memory: Select your confidence level

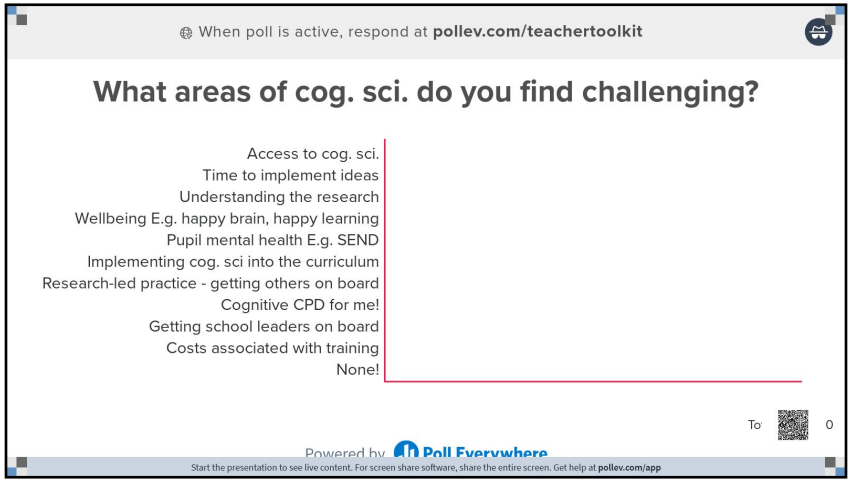
31



End of surveys



End of surveys



End of surveys

Research Sample (to date)

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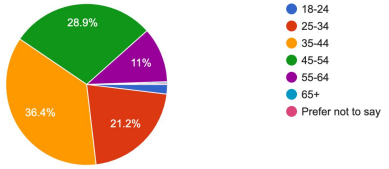
1. 15,500+ pieces of data
2. 76.3% female
3. 35.2% aged 35-44
4. 23.4% BAME
5. 14% taught 25+ years
6. 84.6% work full time
7. 84.7% live in the UK; 16% based in South East
8. 43% secondary; 19% primary; 3.3% special; 2.8% PRU



Teacher Training + Cognitive Science

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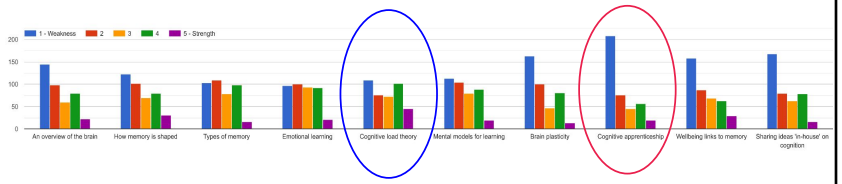

1. Weakness? = cognitive apprenticeship; wellbeing + cognition
2. Strongest? = cognitive load theory

Challenges = Access + Using …

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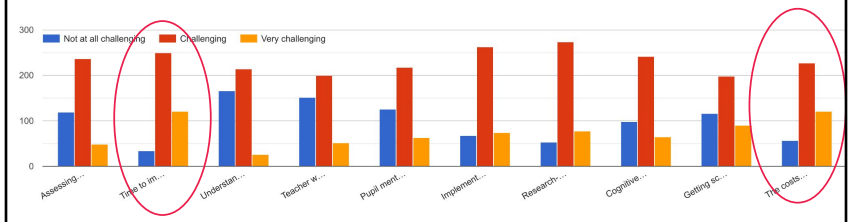

1. **Very challenging?** = costs, time and availability/access; transfer
2. **Not challenging?** = understanding

Take part?

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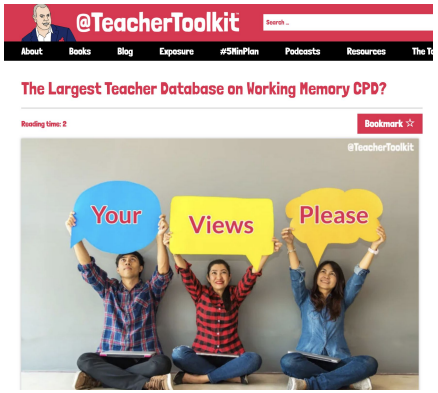

www.TeacherToolkit.co.uk/Working-Memory-CPD

Brain Breaks

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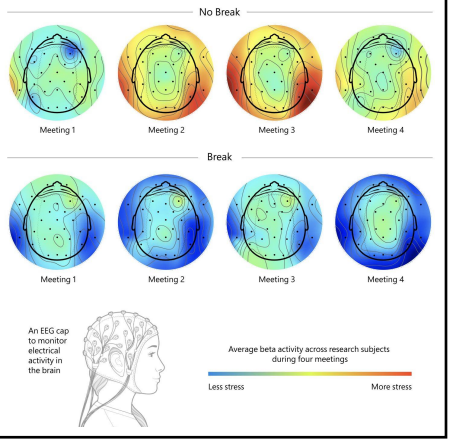
- 14 people across 2 days of meetings
- EEG caps to monitor electrical pulses;
  electro-encephalo-gram
- Day 1 = x4 back-to-back 30 minutes
- Day 2 = x4 back-to-back 30 minutes meetings with 10 minute breaks
- Back-to-back = promotes stress
- Breaks = reduce stress; improve performance.
- Ignore at your peril! I've worked in 25-minute chunks ever since!
- Ref: Microsoft Labs



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Brain Break

A pause helps retention …

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or visit

PollEV.com/TeacherToolkit

1. Retrieval Practice is ... 0

a) an assessment strategy 0%

b) a learning strategy 0%

c) the first part lesson design 0%

Start the presentation to see live content. For screen share software, share the entire screen. Get help at pollev.com/app

2. Retrieval Practice research dates back to ... ` 0

a) 1885 0%

b) 1935 0%

c) 2005 0%

Start the presentation to see live content. For screen share software, share the entire screen. Get help at pollev.com/app

3. Effective study suggests teachers should ... 0

a) reteach material 0%

b) retest material 0%

c) reteach and retest material 0%

d) reinforce key material 0%

Start the presentation to see live content. For screen share software, share the entire screen. Get help at pollev.com/app

4. Interleaving practice is ...

0

a) Teaching using one topic at a time

0%

b) Teaching using disconnected topics

0%

c) Teaching using similar topics

0%

5. Which of these are the best times to test students' understanding?

0

a) Never: testing creates anxiety ...

0%

b) Before they have learnt it: find out what they already know ...

0%

c) Shortly after teaching it: force students to retrieve the learning ...

0%

d) A few weeks after teaching it: build in a delay to allow forgetting.

0%

6. A person's learning style determines ...

0

a) Which part of the brain is used during a learning task

0%

b) How well students learn in different modalities (visual, auditory, kinesthetic)

0%

c) Nothing about a student's performance on learning tasks.

0%

End of surveys

What, Why, How...

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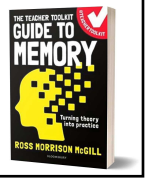
1. A journey with cognitive science
2. To support teachers with/without any formal training
3. Gathering insights; signposting key strategies



Amzn.to/3y00oq6

Guide To Memory

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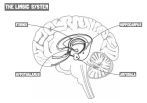
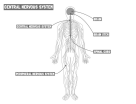
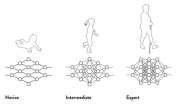
Classroom Ideas, Teacher Training & School Resources

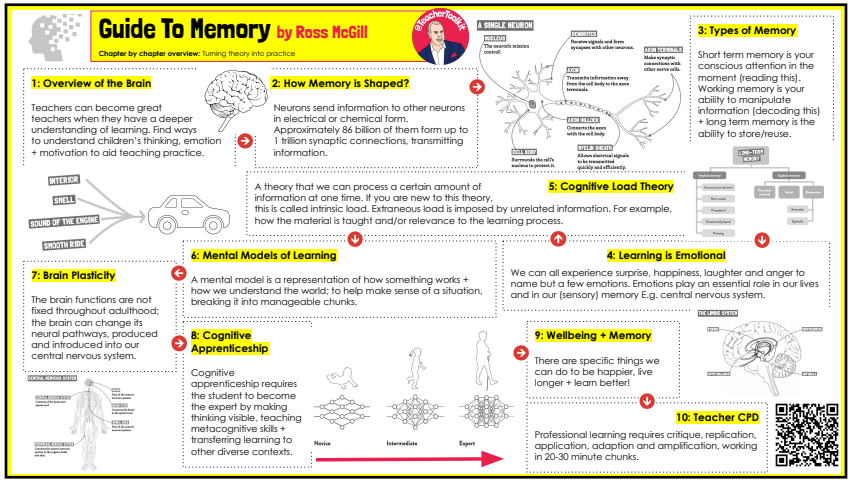



The Brain	How memory changes	Types of memory	Learning is emotional	Cognitive load
An overview + history	*When neurons connect*	*A beginner's guide*	*Hinder or support?*	*What is it? How to manage ...*
1	2	3	4	5

Mental models	Brain plasticity	Cognitive apprenticeship	Wellbeing + Memory	Teacher Training
Mnemonics for mental imagery	*How it forms or degrades*	*Moving from novice to expert*	*Sleep, diet and exercise*	*Access, costs and leadership*
6	7	8	9	10



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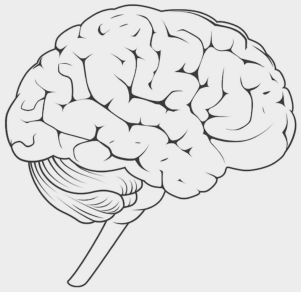
CHAPTER 1
AN OVERVIEW OF THE BRAIN



Main sections of the brain

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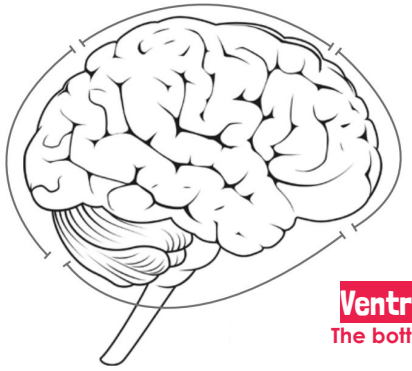
Dorsal
The top

Caudal
The back (or tail)



Rostral
The front

Ventral
The bottom

Five regions of the brain

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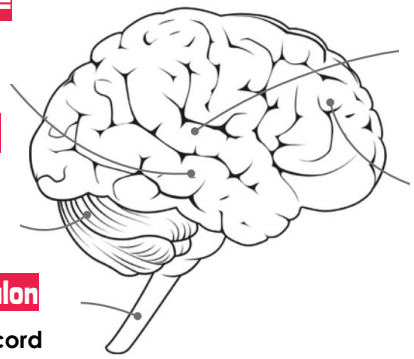
Cephalon; Greek for kephalē = head.

MESENcephalon =
Meso = Middle

METENcephalon
Meta = Beyond

MYELENcephalon
Mylos = Spinal cord



DIENcephalon
Dia = through

TELENcephalon
Tele = far/end

Cerebral Cortex, Cerebellum & Brainstem

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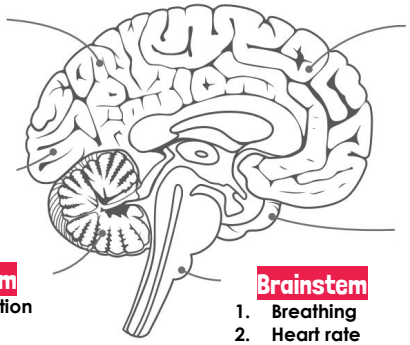
Parietal Lobe
1. Taste
2. Touch
3. Smell
4. Hearing

Occipital Lobe
1. Vision
2. Colour processing

Cerebellum
1. Coordination
2. Balance
3. Attention!



Brainstem
1. Breathing
2. Heart rate
3. Temperature

Frontal Lobe
1. Speaking
2. Judgement
3. Memory
4. Thinking
5. Movement

Temporal Lobe
1. Fear
2. Feelings
3. Hearing
4. Behaviour
5. Speech

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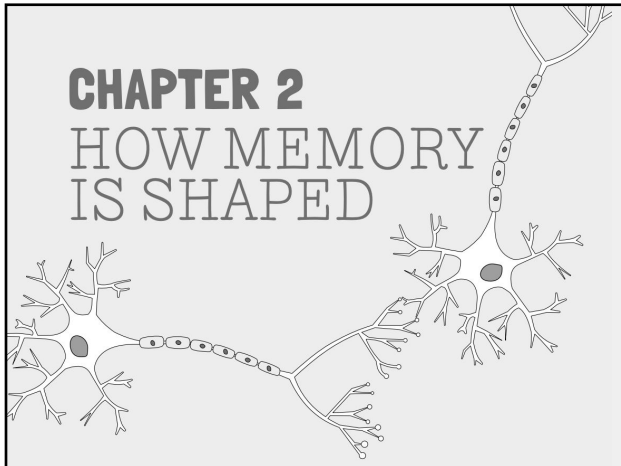
CHAPTER 2
HOW MEMORY IS SHAPED



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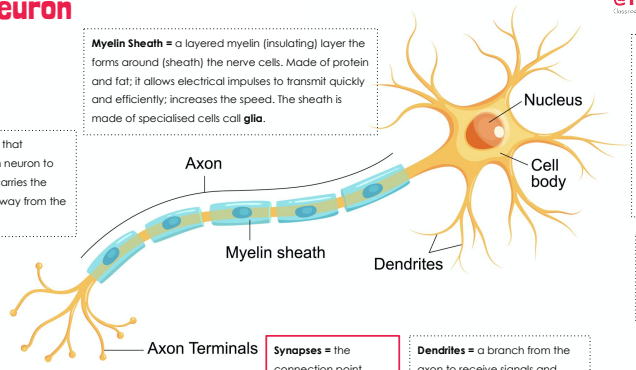
One Neuron

Myelin Sheath = a layered myelin (insulating) layer the forms around (sheath) the nerve cells. Made of protein and fat; it allows electrical impulses to transmit quickly and efficiently; increases the speed. The sheath is made of specialised cells call **glia**.

Axon = nerve that transmits from neuron to neuron and carries the information away from the cell body.

Nucleus = mission control! oval shaped membrane-bound structure; the main body of the neuron which transmits information

Cell Body = the protection surrounding a nucleus (soma)



Axon Terminals = the endings that **make** synaptic **connections** with other nerve cells

Synapses = the connection point where one neuron communicates with another

Dendrites = a branch from the axon to receive signals and form synapses. These get covered with synapses from **other** neurons

Image: **Shutterstock**

Neuroplasticity

Synapses = the connection point where one neuron communicates with another

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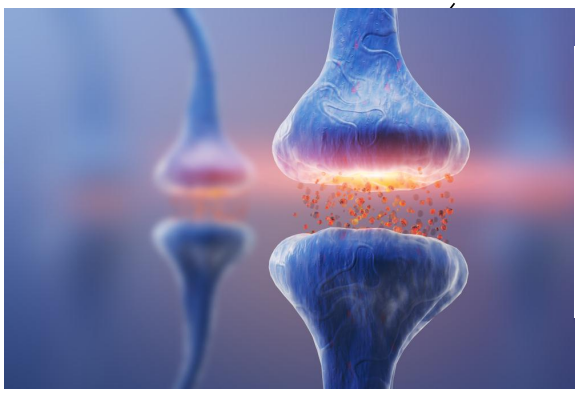

Image: **Shutterstock**

Called the synaptic cleft …

There is NO physical connection!

The neurons are close enough to release chemicals …

#GuideToMemory

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Have YOU been listening?

QUIZ TIME

Time for a test!

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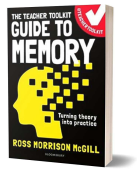
Quiz time!

1. Scan the QR
2. Get ready to take part
3. 15 seconds per question
4. 9 questions …



#GuideToMemory

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Brain Break

A pause helps retention …

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CHAPTER 3

AN INTRODUCTION TO TYPES OF MEMORY

Scu bap bap bee dee boo do

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1. Can you see learning happen?
2. How does learning happen?

Beginners' Guide To Learning

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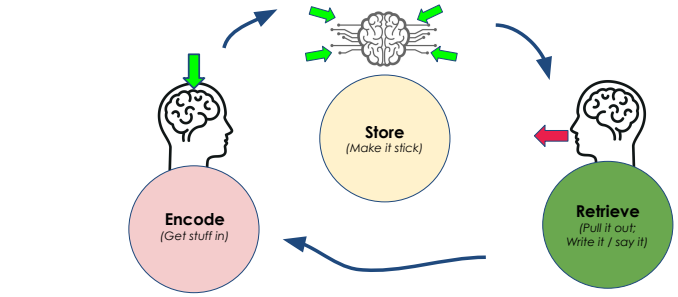
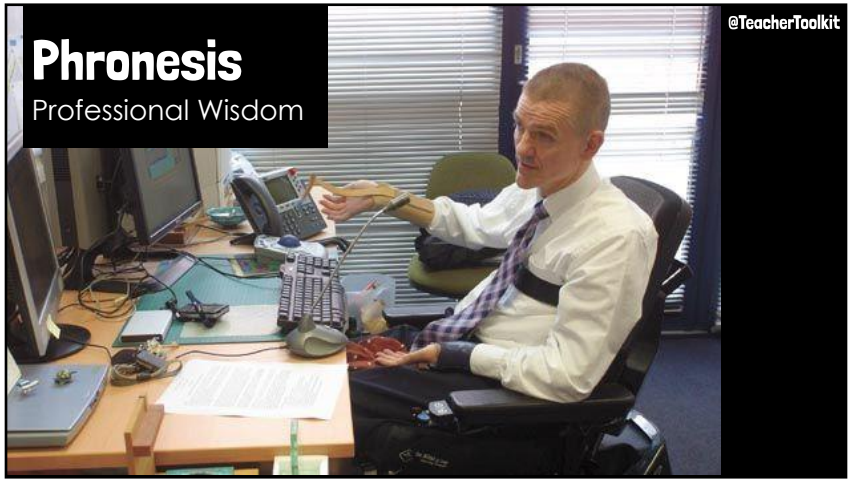


Spaced Practice (week/month/term = retest, not reteach)



Schema Construction

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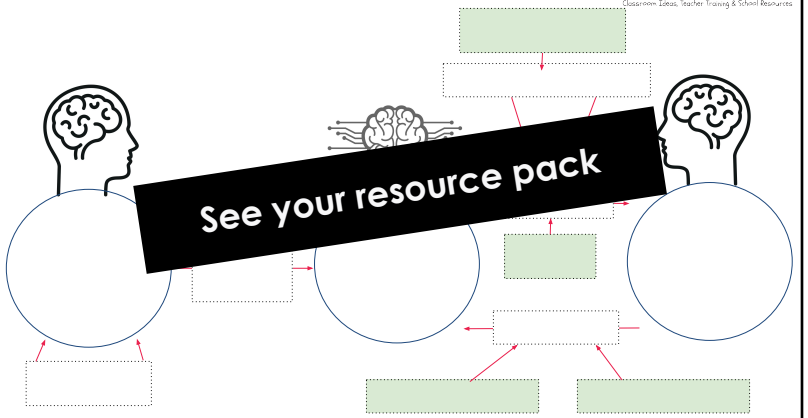

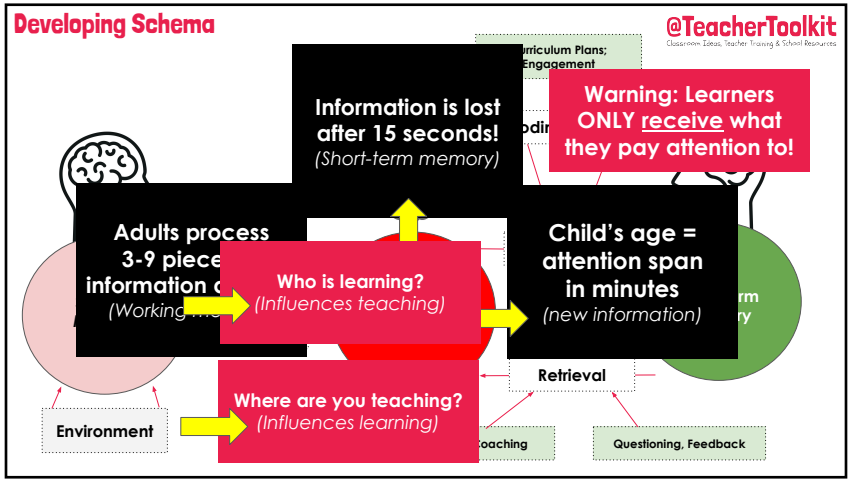

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When do you start teaching students HOW to learn?

A pause helps retention …

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Brain Break

A pause helps retention …

60-Second Retrieval Resource

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Last Month *Knowledge covered ...*	**Last Week** *Common threads ...*
Today *Clarify misconceptions; key questions ...*	**Last Lesson** *Connected schema ...*

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How would you use this?

A pause helps retention …

Memory in 30 seconds

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1. The closet is a good metaphor; memory is reconstructive
2. But the 'wardrobe needs to be tidied' = easier to find
3. Hang up a shirt = Recall makes it easier to remember

Definitions Page

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1. Short Term Memory = ...
2. Working Memory = ...
3. Long-Term Memory = ...
4. Intrinsic Load = ...
5. Extraneous .....
6. Retrieval Pr .....
7. Spaced/Dis ractice = ...
8. Interleaving Practice = ...
9. Dual Coding = ...
10. Concrete Examples = ...




Types of Memory

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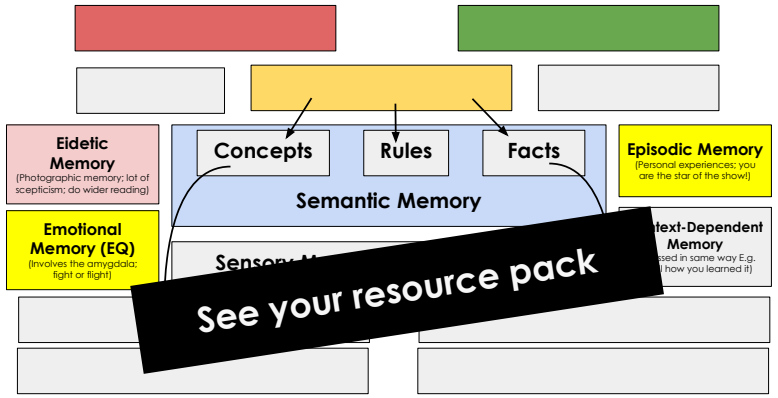

Explainer – Practical Idea – Worked Example – Template

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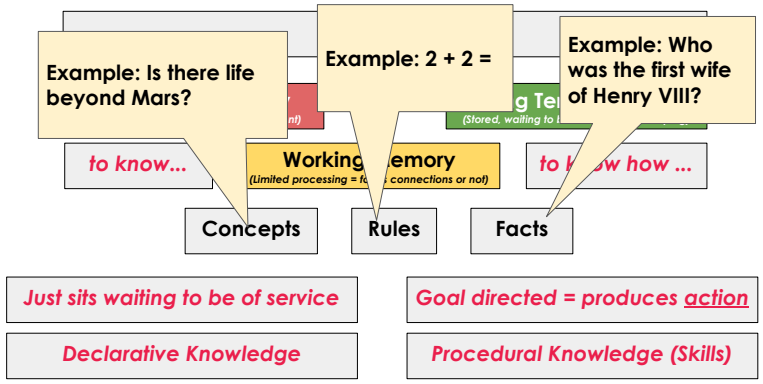

Semantic or Episodic Memory

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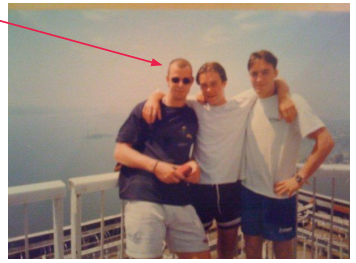

Semantic:

General knowledge about NYC

Can be recalled at anytime

Episodic:

Related to an (episode in your life) event

Connected to a time and place

Fades and is not reliable...

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Brain Break

A pause helps retention …

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Ideas To Help You

Key resources to get started …

Direct Instruction (MINT)

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1. M = Materials
2. I = In/out of seats
3. N = Noise level
4. T = Time

Image: Shutterstock

Instruction Script

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Direct Instruction

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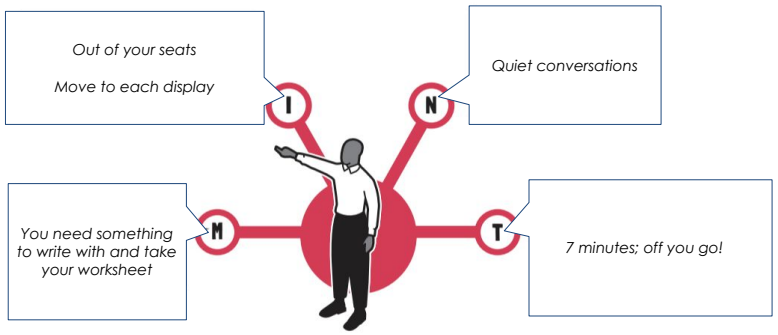

Redundancy Effect

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Image by onderzoekonderwijs

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Bears enjoy eating honey.

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Bears enjoy eating honey.

Dual Coding

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Without Dual Coding

Why are volcanoes dangerous?

With Dual Coding

Why are volcanoes dangerous?

Cognition + Perception

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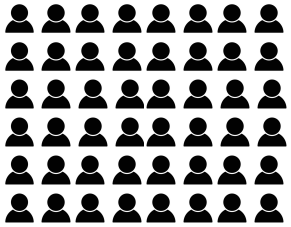
Novice

Slide from 2013



Expert

Slide from 2021

Modelling Mantra

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1. I Do
2. We Do
3. You Do.

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7 x ? = 28

74

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How do you consciously use non-verbal signals?

A pause helps retention …

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Brain Break

A pause helps retention …

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Conclusions...

(with some QR codes)

Curriculum 'Learning' Loop

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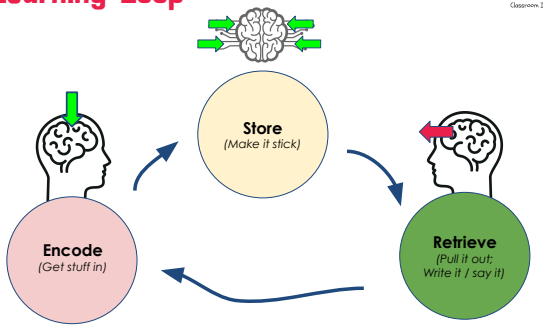

Spaced Practice (week/month/term = retest, not reteach)

Scheme of work

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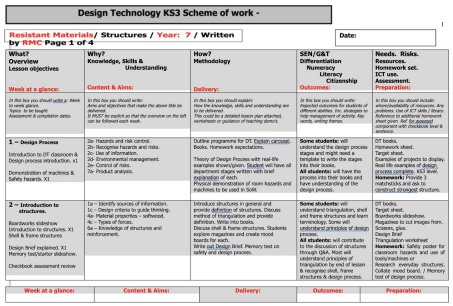


Design Technology KS3 Scheme of work -

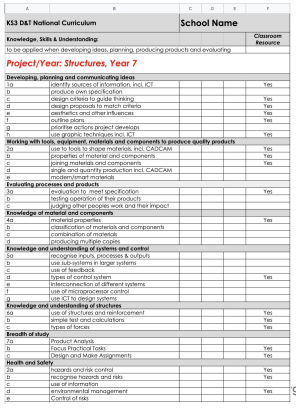
Resistant Materials/ Structures / Year: 7 / Written

Date:

Page 1 of 4

What? Overview Lesson objectives	Why? Knowledge, Skills & Understanding	How? Methodology	SEN/G&T Differentiation Numeracy Literacy Citizenship	Needs. Risks. Resources. Homework set. ICT use. Assessment.
Week at a glance:	Content & Aims:	Delivery:	Outcomes:	Preparation:
In this box you should write a: Week to week glance. Topics to be taught. Assessment & completion dates.	In this box you should write: Aims and objectives that make the above title be delivered. It MUST be explicit so that the overview on the left can be followed each week.	In this box you should explain: How the knowledge, skills and understanding are to be delivered. This could be a detailed lesson plan attached, worksheets or guidance of teaching stimuli.	In this box you should write: Expected outcomes for students of different abilities. Inc. strategies to help management of activity. Key words, writing frames.	In this box you should include: where/availability of resources. Any problems. Use of ICT skills / library. Reference to additional homework sheet given. Ref. for assessed homework with checkbook level & sentence.
1 – Design Process Introduction to DT classroom & Design process introduction. x1 Demonstration of machines & Safety hazards. X1	2e- Hazards and risk control. 2b- Recognise hazards and risks. 2c- Use of information. 2d- Environmental management. 2e- Control of risks. 7e- Product analysis.	Outline programme for DT. Explain carousel. Books. Homework expectations. Theory of Design Process with real-life examples shown/given. Student will have all department stages written with brief explanation of each. Physical demonstration of room hazards and machines to be used in Skills.	Some students: will understand the design process stages and might need a template to write the stages into their books. All students: will have the process into their books and have understanding of the design process.	DT books. Homework sheet. Target sheet. Examples of projects to display. Real life examples of design process complete. KS3 level. Homework: Provide 3 materials/a and ask to construct strongest structure.
2 – Introduction to structures. Boardworks slideshow Introduction to structures. X1 Shell & frame structures Design Brief explained. X1 Memory task/starter slideshow. Checkbook assessment review	1a – Identify sources of information. 1c – Design criteria to guide thinking. 4a- Material properties – softwood. 4c – Types of forces. 6a – Knowledge of structures and reinforcement.	Introduce structures in general and provide definition of structures. Discuss method of triangulation and provide definition. Write into books. Discuss shell & frame structures. Students explore magazines and create mood boards for each. Write out Design Brief. Memory test on safety and design process.	Some students: will understand triangulation, shell and frame structures and learn terminology. Some will understand principles of design process. All students: will contribute to the discussion of structures and shells. Most will understand principles of triangulation by end of lesson & recognise shell, frame structures & design process.	DT books. Target sheet. Boardworks slideshow. Magazines to cut images from. Scissors, glue. Design Brief Triangulation worksheet Homework: Safety poster for workshop/Research and use of tools/machines or Research everyday structures. Collate mood board. / Memory test of design process.
Week at a glance:	Content & Aims:	Delivery:	Outcomes:	Preparation:

The hard work is already done... (Link)



KS3 D&T National Curriculum	School Name	Classroom Resource
Knowledge, Skills & Understanding:		
to be applied when developing ideas, planning, producing products and evaluating		
Project/Year: Structures, Year 7		
Developing, planning and communicating ideas		
1a	identify sources of information, incl. ICT	Yes
b	produce own specification	
c	design criteria to guide thinking	Yes
d	design proposals to match criteria	Yes
e	aesthetics and other influences	Yes
f	outline plans	Yes
g	prioritise actions project develops	
h	use graphic techniques incl. ICT	Yes
Working with tools, equipment, materials and components to produce quality products		
2a	use to tools to shape materials, incl. CADCAM	Yes
b	properties of material and components	Yes
c	joining materials and components	Yes
d	single and quantity production incl. CADCAM	
e	modern/smart materials	
Evaluating processes and products		
3a	evaluation to meet specification	Yes
b	testing operation of their products	
c	judging other peoples work and their impact	
Knowledge of material and components		
4a	material properties	Yes
b	classification of materials and components	
c	combination of materials	
d	producing multiple copies	
Knowledge and understanding of systems and control		
5a	recognise inputs, processes & outputs	
b	use sub-systems in larger systems	
c	use of feedback	
d	types of control system	Yes
e	interconnection of different systems	
f	use of microprocessor control	
g	use ICT to design systems	
Knowledge and understanding of structures		
6a	use of structures and reinforcement	Yes
b	simple test and calculations	Yes
c	types of forces	Yes
Breadth of study		
7a	Product Analysis	
b	Focus Practical Tasks	Yes
c	Design and Make Assignments	Yes
Health and Safety		
2a	hazards and risk control	Yes
b	recognise hazards and risks	Yes
c	use of information	
d	environmental management	
e	Control of risks	Yes

9

Small tweaks ...

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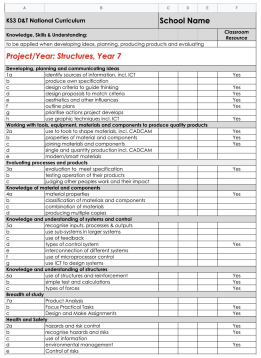

KS3 D&T National Curriculum	School Name	Classroom Resource
Knowledge, Skills & Understanding:		
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Project/Year: Structures, Year 7		
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b	produce own specification	
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d	design proposals to match criteria	
e	aesthetics and other influences	
f	outline plans	
g	prioritise actions project develops	
h	use graphic techniques incl. ICT	
Working with tools, equipment, materials and components to produce quality products		
2a	use to tools to shape materials, incl. CADCAM	
b	properties of material and components	
c	joining materials and components	
d	single and quantity production incl. CADCAM	
e	modern/smart materials	
Evaluating processes and products		
3a	evaluation to meet specification	
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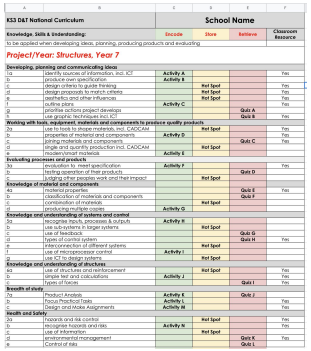
Knowledge of material and components		
4a	material properties	
b	classification of materials and components	
c	combination of materials	
d	producing multiple copies	
Knowledge and understanding of systems and control		
5a	recognise inputs, processes & outputs	
b	use sub-systems in larger systems	
c	use of feedback	
d	types of control system	
e	interconnection of different systems	
f	use of microprocessor control	
g	use ICT to design systems	
Knowledge and understanding of structures		
6a	use of structures and reinforcement	
b	simple test and calculations	
c	types of forces	
Breadth of study		
7a	Product Analysis	
b	Focus Practical Tasks	
c	Design and Make Assignments	
Health and Safety		
2a	hazards and risk control	
b	recognise hazards and risks	
c	use of information	
d	environmental management	
e	Control of risks	

Before



KS3 D&T National Curriculum	School Name	Encode	Store	Retrieve	Classroom Resource
Knowledge, Skills & Understanding:					
to be applied when developing ideas, planning, producing products and evaluating					
Project/Year: Structures, Year 7					
Developing, planning and communicating ideas					
1a	identify sources of information, incl. ICT	Activity A			Yes
b	produce own specification	Activity B			
c	design criteria to guide thinking		Hot Spot		Yes
d	design proposals to match criteria		Hot Spot		Yes
e	aesthetics and other influences		Hot Spot		Yes
f	outline plans	Activity C			Yes
g	prioritise actions project develops			Quiz A	
h	use graphic techniques incl. ICT			Quiz B	Yes
Working with tools, equipment, materials and components to produce quality products					
2a	use to tools to shape materials, incl. CADCAM		Hot Spot		Yes
b	properties of material and components	Activity D			Yes
c	joining materials and components			Quiz C	Yes
d	single and quantity production incl. CADCAM		Hot Spot		
e	modern/smart materials	Activity E			
Evaluating processes and products					
3a	evaluation to meet specification	Activity F			Yes
b	testing operation of their products			Quiz D	
c	judging other peoples work and their impact		Hot Spot		
Knowledge of material and components					
4a	material properties			Quiz E	Yes
b	classification of materials and components			Quiz F	
c	combination of materials		Hot Spot		
d	producing multiple copies	Activity G			
Knowledge and understanding of systems and control					
5a	recognise inputs, processes & outputs	Activity H			
b	use sub-systems in larger systems		Hot Spot		
c	use of feedback			Quiz G	
d	types of control system			Quiz H	Yes
e	interconnection of different systems		Hot Spot		
f	use of microprocessor control	Activity I			
g	use ICT to design systems		Hot Spot		
Knowledge and understanding of structures					
6a	use of structures and reinforcement		Hot Spot		Yes
b	simple test and calculations	Activity J			Yes
c	types of forces			Quiz I	Yes
Breadth of study					
7a	Product Analysis	Activity K		Quiz J	
b	Focus Practical Tasks	Activity L			Yes
c	Design and Make Assignments	Activity M			Yes
Health and Safety					
2a	hazards and risk control		Hot Spot		Yes
b	recognise hazards and risks	Activity N			Yes
c	use of information		Hot Spot		
d	environmental management			Quiz K	Yes
e	Control of risks			Quiz L	

After

Small tweaks...

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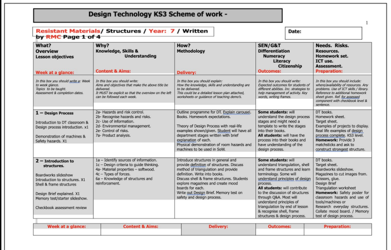

Before

Lesson Overview	Encoding	Storage	Retrieval	Resources
Week 1	**Activity B** 2b- Recognise hazards and risks.	Physical demonstration of room hazards and machines to be used in SoW.		Workshop scenario First aid kit
Week 2	**Activity A** 2a- Identify sources of information, inc. ICT		**Quiz B** = H&S hazards	Preplanned spelling quiz
Week 3		Develop design criteria using brief to guide thinking and decisions		Case study
Week 4		Introduce proposals to match specification criteria	**Quiz A** = Sources	Differentiated worksheet
Week 5		Provide aesthetic scenarios to influence choices and decisions; conflicts on interest.		Range of children's toys
Week 6	**Activity C** Outline plans using ABC			Modelling outline
Week 7				

After

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Timetable Design

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Year 7	Term 1									
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Topic	Ergonomics				Structures					
Date (w/b)										
Assessment	Knowledge Organiser				Knowledge Organiser		Ergonomics			
Resources	Chairs	Tables	Stools		Bridges	Buildings	…ers	Fencing	Shells	Arches
Knowledge + Skills	Add curriculum …					…d curriculum detail here				
Interleaved Materials		Structures								
Retrieval/ Spaced						Ergonomics			Ergonomics	

Spaced practice

Interleaved practice

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1. **Build activation & storage strength**
2. **Reduce stress; increase success rate**
3. **Teach HOW to understand learning.**

Neurotypical recommendations ...

The WHY

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Most people can drive a car ...

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BACK UP

9 Effective Learning Techniques

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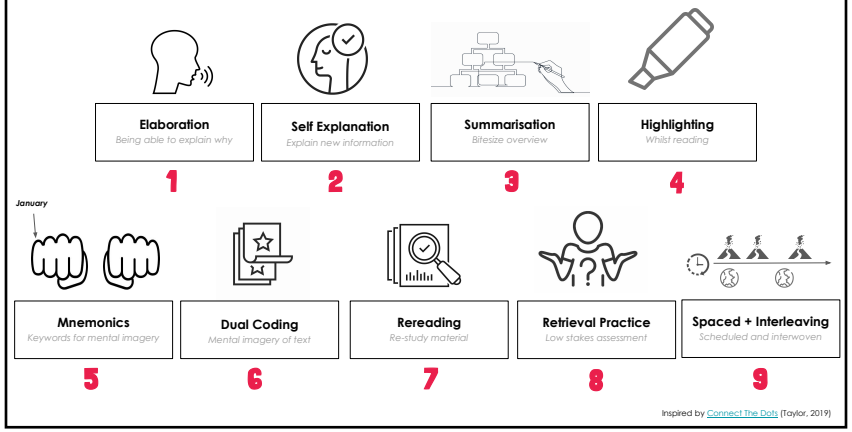

Inspired by Connect The Dots (Taylor, 2019)

9 Effective Learning Techniques

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	Technique	Efficacy/Impact	What is it?
1	**Retrieval Practice**	**High**	Low stakes quizzing; desirable difficulty
2	**Spaced + Interleaving**	**High**	Presenting scheduled and mixed content over time
3	**Elaboration**	**Medium**	Generating and being able to explain why
4	**Self-Explanation**	**Low**	Explaining new information
5	**Summarisation**	**Low**	Bitesize overview
6	**Highlighting**	**Low**	Marking potentially important information whilst reading
7	**Keyword mnemonics**	**Low**	Keywords for mental models/imagery
8	**Imagery for Text**	**Low**	Mental imagery for text (dual coding); pair text with images
9	**Rereading**	**Low**	Restudying text material
	All these strategies have an impact on learning. N.b. Spaced + Interleaving have been amalgamated for this resource; they are separate strategies and interleaving is sometimes known as 'distributed practice'.		

Inspired by (Table 1: Learning Techniques) 10.1177/1529100612453266 (Dunlosky et al (2013)

9 Study Skills, Month by Month

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Month	September	Octob	...pril	May	June
Technique What it's for	**Highlighting** Modelling important text whilst reading	**Highlight** Modelling important text whilst reading	**Highlighting** Modelling important text whilst reading	**Highlighting** Modelling important text whilst reading	**Highlighting** Modelling important text whilst reading
Designed to be used as a guide for teachers, parents and tutors to be introduced to each technique month by month to support retention, study skills and toward end of year assessment. Each technique should be re positioned according to the curriculum and timeframe being used..		**Summarise** A little bit overview of what has been learnt	**Summarisation** A little bit overview of what has been learnt	**Summarisation** A little bit overview of what has been learnt	**Summarisation** A little bit overview of what has been learnt
	Introduce one new technique each mo		**Self Explanation** Explaining new information	**Self Explanation** Explaining new information	**Self Explanation** Explaining new information
			Elaboration Generating and being able to explain why	**Elaboration** Generating and being able to explain why	**Elaboration** Generating and being able to explain why
			Mnemonics Using keywords to support mental models	**Mnemonics** Using keywords to support mental models	**Mnemonics** Using keywords to support mental models
			Imagery for Text Pairing text with images for mental models	**Imagery for Text** Pairing text with images for mental models	**Imagery for Text** Pairing text with images for mental models
			Rereading Restudying text material but being 'tested more	**Rereading** Restudying text material but being 'tested more	**Rereading** Restudying text material but being 'tested more
	Space/ Interleaving Scheduling past content and mixed material	**Space/ Inter** Scheduling past and mixed m	**Space/ Interleaving** Scheduling past content and mixed material	**Space/ Interleaving** Scheduling past content and mixed material	**Space/ Interleaving** Scheduling past content and mixed material
	Retrieval Practice Low stakes assessment which is desirably difficult	**Retrieval Pr** Low stakes ass which is desirab	**...al Practice** ...assessment ...sirably difficult	**Retrieval Practice** Low stakes assessment which is desirably difficult	**Retrieval Practice** Low stakes assessment which is desirably difficult

7/1529100612453266 (Dunlosky et al (2013)

The Components of Metacognition

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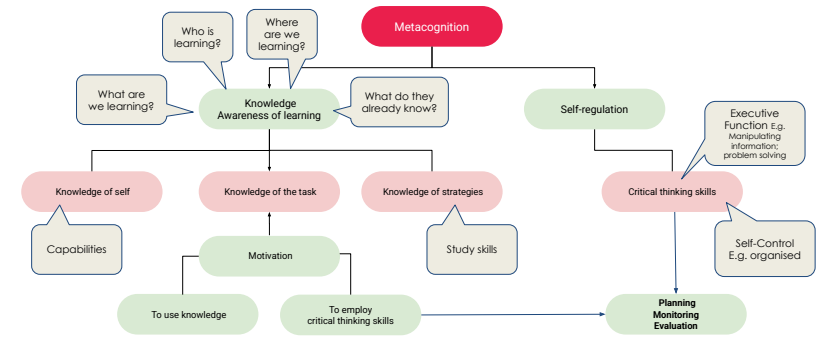
A simplification of complex process



Inspired by How to Create Autonomous Learners (Moir, 2023)

Cognitive Apprenticeship + Metacognition *(self-regulation, not thinking about thinking)*

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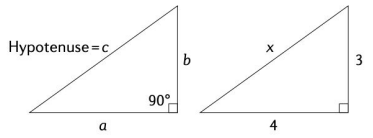
a



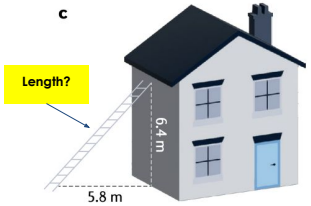
Pythagorean theorem

$c^2 = a^2 + b^2$

b

$x^2 = 4^2 + 3^2$

c



Knowledge retention = the ability to retain

A) Retain the theorem = in a right-angled triangle the length of the hypotenuse squared is equal to the combined squares of the lengths of the other two sides

Knowledge transfer = the ability to use knowledge in a unknown problem

B) When knowledge is applied in a new context that differs from the way in which it was originally learned

Transfer requires memory retention. Remember the theory, then use somewhere else.

Brain Dump Example

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1.The question or task is…	
2. What I know…	
3. What I didn't know…	
4. What I need to find out next time?	

Retrieval Hands

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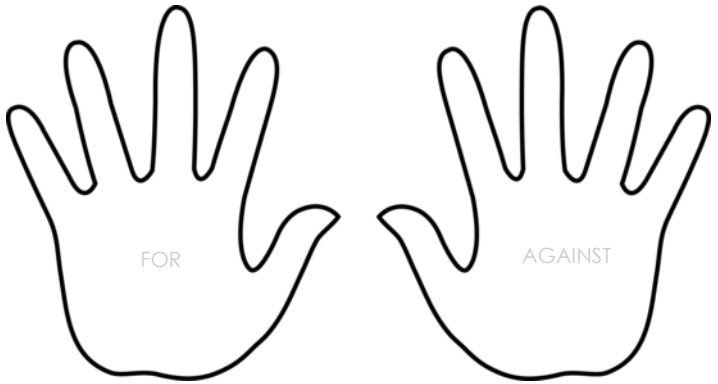

Instructions: Write two-sided question (for & against) on each hand; 5 facts each

Retrieval Dinner

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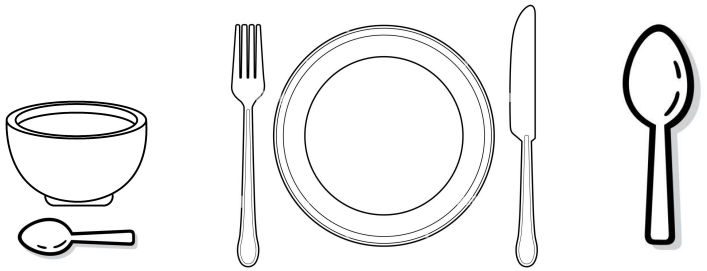

Instructions: Write one fact in the soup bowl; more details on the dinner plate. One exciting fact on the dessert spoon!

Retrieval Pyramid

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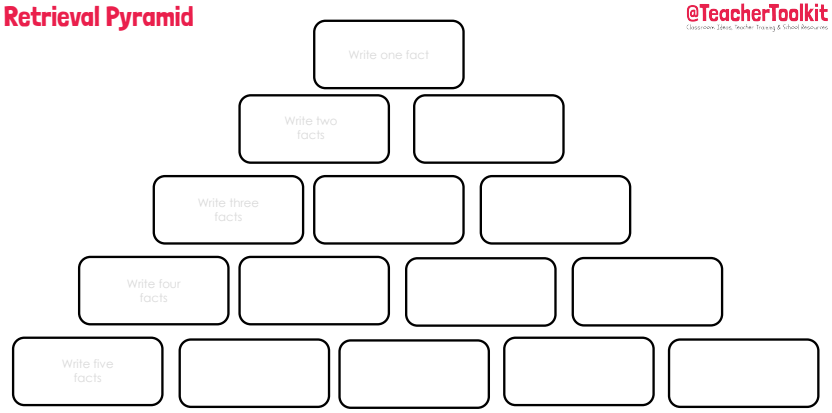

Instructions: Write the answers to the questions. One fact, two facts, three facts etc.

Fix The Error

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	Spot one error	Spot all the errors	Redraft
	Mount Vesuvius is the only active volcano on mainland Europe and is most famous for its catastrophic eruption in AD 79, which buried the Roman cities of Pompeii and Herculaneum under layers of volcanic ash and pumice. Interestingly, Vesuvius has been dormant since its last eruption in **1994**.	Mount Vesuvius is one of **three** active volcanoes on mainland Europe and is most famous for its catastrophic eruption in **1305**, which buried the **12 people** under layers of volcanic ash and pumice. Interestingly, Vesuvius has been **active** since its last eruption in **1994**.	**Correct example:** Mount Vesuvius is the only active volcano on mainland Europe and is most famous for its catastrophic eruption in AD 79, which buried the Roman cities of Pompeii and Herculaneum under layers of volcanic ash and pumice.
Write your version on this row			

Instructions: Correct each statement in the grid

Cops, Robbers & Teachers

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	1. What do you know? *Facts you already know*	2. What did you forget? *Facts you have had to use from a friend*	3. Expert knowledge *Connecting the facts you knew with information you gathered from someone else*
			
			

Instructions: Using the analogy of cops and robbers, write down things you know; write down things you found from someone else

Dual Coding Retrieval

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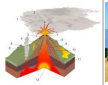
	Today	Last lesson	Last week	Last month	Last term	Last year
Image		Eyjafjallajokull 				
Write **one fact**						
Write a **paragraph**						
Label the **diagram**						

Instructions: Use the images to remember the main points

Dual Coding Example

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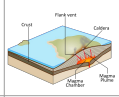
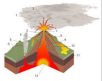
	Today	Last lesson	Last week	Last month	Last term	Last year
Image		Eyjafjallajokull 				
Write **one fact**	*The purpose of the Earth's crust is …*	*Eyjafjallajokull erupted in 2010*	*Watch the video and explain how lava, ash, and gases are released during eruptions*	*Magma rises through a vent*	*Kilimanjaro is a dormant volcano in Tanzania*	*Volcanoes form where tectonic plates interact*
Write a **paragraph**	*Volcanoes are formed …* *Across Europe, there are …*	*Describe the impact the 2010 eruption had on aviation travel*	*Explain what happens during an eruption*	*Explain the journey of magma to the Earth's surface*	*Compare dormant and active volcanoes*	*Explain why volcanoes occur in some places but not others*
Label the **diagram**	*Are these parts labelled correctly?*	*Where is Iceland on the world map?*	*Provide an eruption sequence diagram for students to place in the correct order*	*Magma chamber, vent, crater, ash cloud*	*African rift valley map*	*Plate boundary diagram*

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